ONKYO

SK-10W

Powered Subwoofer System

USER'S GUIDE

IMPORTANT SAFEGUARDS

1. **Read Instructions** - All the safety and operation instructions should be read before the SK-10W is operated.
2. **Retain Instructions** - The safety and operating instructions should be kept for future reference.
3. **Heed Warnings** - All warnings on the SK-10W and in these operating instructions should be followed.
4. **Follow Instructions** - All operating and other instructions should be followed.
5. **Water and Moisture** - The SK-10W should not be used near water. For example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool.
6. **Ventilation** - The SK-10W should be situated so that its location or position does not interfere with its proper ventilation. For example, the system should not be situated on a bed, sofa, rug or similar surface that may block airflow past the rear heatsinks; or placed in a built-in installation such as a bookcase or cabinet that may impede the flow of air past the heatsinks.
7. **Heat** - The SK-10W should be situated away from heat sources such as radiators, heaters, furnace outflow vents or other devices which produce heat.
8. **Power Sources** - The SK-10W should be connected to a power supply only of the type described in these operation instructions or as marked on the Component.
9. **Grounding or Polarization** - The SK-10W is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is an intentional safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact an electrician to replace the obsolete (unpolarized) outlet. Do not defeat the safety purpose of the polarized plug.
10. **Power Cord Protection** - Power supply cords should be routed so that they are not likely to be walked upon or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit the SK-10W.
    To prevent electric shock, do not use the SK-10W polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.
11. **Nonuse Periods** - The power cord of the SK-10W should be unplugged from the outlet when left unused for a long period of time.
12. **Damage Requiring Service** - The SK-10W should be serviced only by qualified service personnel when:

A. SK-10W power supply cord or the plug has been damaged; or
B. Objects have fallen or liquid has spilled into the SK-10W; or
C. The SK-10W has been exposed to rain; or
D. The SK-10W does not appear to operate or exhibits a marked change in performance; or
E. The SK-10W has been dropped or damaged.

13. **Servicing** - The user should not attempt to service the SK-10W beyond those means described in this operating manual. All other servicing should be referred to an authorized ONKYO Service Center.

WARNING - To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

The nature of low bass

Sound is created by compression and expansion of air. These waves propagate through your room like ripples through a pond. Low frequencies are composed of very large waves that measure twenty feet or more from "crest to crest" (their size helps explain why subwoofers must have big speaker cones and ample power).

Because bass frequencies are so large, they tend to be non-directional. In other words, it is very difficult to perceive the source of low frequency sounds. This property increases your options for subwoofer placement. You can move the subwoofer away from your main listening speakers. In fact, it can even be placed to the side or behind the listening position.

There are two considerations that may limit subwoofer placement. The first is the length of the connection cable that can be used between the SK-10W and the Receiver (the term "Receiver" is used here for simplification and means the "control electronics" such as an Integrated Amp, Pre-Amp, or Receiver). We do not recommend using an "RCA type" cable that is longer than 25'. Since you will probably need to route the cable around the perimeter of the room from your stereo system to the SK-10W you will probably be limited to quite a bit less than 25' total distance.

The second consideration depends on the dimensions (and thus cubic volume) of your listening room. It is easier for a subwoofer to excite the air in, for example, a small basement recreation room than it is in a huge living room with cathedral ceilings. If your listening room has a high cubic volume, we recommend that you place the subwoofer cabinet fairly close to the listening position so that the bass waves won't dissipate their energy before their arrival.

SK-10W Hook-up

The SK-10W active subwoofer receives input signals from the Receiver via a standard stereo connection cable - the same type that you use to hook a cassette deck or CD player to your Receiver, or by using speaker wire. In either case the SK-10W's internal amplifier is then used to power the subwoofer.

1.- Make sure that the SK-10W's power cord is unplugged and that the receiver is turned off.

2a.- If you have a dedicated subwoofer output on your Receiver, plug a pair of interconnect cables into the "RCA-type" **INPUT** sockets on the back of the SK-10W.

2b.- If you do not have a dedicated subwoofer output on your Receiver, connect speaker wires to the **HIGH LEVEL INPUT** speaker connections on the back of the SK-10W.

3a.- If you have a dedicated subwoofer output on your Receiver, plug the other end of the cables into the sockets marked **SUB-WOOFER OUT** on the back of the Receiver. If your Receiver has only one output, you can use a "Y" connector to convert the single output into a dual output.

3b.- If you do not have a dedicated subwoofer output on your Receiver, connect the other ends of the speaker wires directly to the speaker terminal on the back of your Receiver. Make sure you check polarity on each of the speaker wires that run to the subwoofer.

Optimizing subwoofer performance

Variable Crossover

The Low Pass Filter (LPF) cut off point is variable on the SK-10W. In other words, you can determine the crossover point between your subwoofer and your main channel speakers.

The **CROSSOVER FREQUENCY** control on the back of the SK-10W enables you to vary the LPF from 50Hz to 150Hz. Ideally, this control should be adjusted so that the SK-10W will "pick-up" the bass where your main channels "leave-off". Therefore if your main channels frequency response is 80Hz-20kHz +/- 3dB then you would adjust the crossover frequency to approximately 80Hz.

However, many speaker manufacturers do not list their +/- 3dB frequency responses. Therefor, a little experimentation may be necessary in order to make the subwoofer sound like a natural addition to your sound system.

Input Sensitivity

The **INPUT SENSITIVITY** on the back of the SK-10W is similar to a volume control. The farther that you turn this control clockwise, the louder the subwoofer will play with any given input. The farther counter-clockwise, the softer it will play with any given input.

Placement

While room decor and arrangement are always important factors, the most effective placement for your SK-10W subwoofer is best determined by experimentation. If possible, try moving the cabinet while playing bass-heavy music. Sometimes moving your subwoofer into or out of a corner dramatically changes its performance.

Phase Control

The **PHASE** switch on the back of the SK-10W enables you to switch between "normal" and "inverted" phase. Depending on the placement of the subwoofer in your room relative to your main speakers, the SK-10W may have more perceived output with the **PHASE** switch "**inverted**" rather than "**normal**".

After you have placed the SK-10W where you want it in your listening room, play music that has bass heavy content. Sit in your regular listening position and listen to the overall bass volume. Turn the receiver volume down, flip the **PHASE** switch on the back of the SK-10W to the other position. Reset the volume to the same position as before and play the same bass heavy music. If you notice that one of the two positions has significantly more bass output than the other, flip the **PHASE** switch to the position with the greater bass output.

SPECIFICATIONS

	SK-10W
TYPE	Powered Bass Reflex
WOOFER	10" Poly Coated High Temp Voice Coil
AMPLIFIER	100 Watt
MAGNET	28 oz. Cross Vented
CABINET	3/4" MDF Tongue and Groove Construction
LOW PASS CROSSOVER FREQUENCY	Variable 50 Hz - 150 Hz High or Low Level Input
HIGH PASS CROSSOVER FREQUENCY	90 Hz Low Level Input Only
FREQUENCY RESPONSE	25 Hz - 150 Hz
DIMENSIONS (L x W x D)	16" x 14" x 15"
WEIGHT	39 lbs.

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Specifications subject to change without notice